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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,832	11/29/2001	Akiko Miyakawa	1642.1001	9732

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EXAMINER

SIMONE, CATHERINE A

ART UNIT PAPER NUMBER

1772

DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/995,832	Applicant(s) MIYAKAWA ET AL.
	Examiner Catherine Simone	Art Unit 1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 9-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-3 and 5-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (4,877,717)

Regarding **claims 1 and 2**, Suzuki et al. discloses a resin-cemented optical element comprising a base member (Fig. 6B-6D, #1) and a resin layer (Fig. 6B-6D, #2) formed on a surface of the base member, wherein the resin layer (Fig. 6D, #2 and Fig. 6E, #4) is in a thickness of 300 μm or smaller (see col. 9, lines 49-51 and see Fig. 9) at least at a part of a region within 1 mm from the peripheral edge face of the resin layer (Fig. 6E, #4). However, Suzuki et al. fails to disclose the resin layer in a thickness of 850 μm or larger at a position which is thickest in the resin layer. Suzuki et al. does teach a thicker portion in the resin layer (see Fig. 6E, #14; also see col. 9, lines 37-39). Therefore, the thickness of the thicker portion of the resin layer would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the thicker portion of the resin layer in Suzuki et al. to have a thickness of 850 μm or larger, since it has been held that where the general conditions of a claim are disclosed in the prior art,

Art Unit: 1772

discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

Regarding **claim 3**, note at least a part of the region outside an effective-diameter region, the resin layer has a thickness which becomes gradually smaller toward a periphery (Fig. 6D, #2). Regarding **claims 5-7**, note an optical article comprises the resin-cemented optical element according to claims 1 and 2 (see col. 1, lines 7-14). Regarding **claims 9 and 10**, the limitation "made by molding" is a method of production and therefore does not determine the patentability of the product itself. The method of forming the product is not germane to the issue of patentability of the product itself. MPEP 2113. Regarding **claims 11 and 12**, note the base member has a concave (see col. 13, line 67) molding surface.

Regarding **claims 13 and 14**, Suzuki et al. discloses a resin-cemented optical element comprising a base member (Fig. 6B-6D, #1) and a resin layer (Fig. 6B-6D, #2) formed on a surface of the base member, wherein the resin layer (Fig. 6D, #2 and Fig. 6E, #4) is in a thickness of 300 μm or smaller (see col. 9, lines 49-51 and see Fig. 9) at least at a part of a region within 1 mm from the peripheral edge face of the resin layer (Fig. 6E, #4). However, Suzuki et al. fails to disclose a maximum thickness of at least 850 μm and a diameter of at least 34 mm. Suzuki et al. does, however, teach a thicker portion in the resin layer and a thickness of the resin (see Fig. 6E, #14 and Fig. 9; also see col. 9, lines 37-39) and a diameter of the resin (see Figs. 9 and 10 and col. 12, lines 21-54). Therefore, the optimum ranges for the maximum thickness and diameter of the resin layer would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results as shown by Suzuki et al. Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's

Art Unit: 1772

invention was made to have modified the resin layer in Suzuki et al. to have a maximum thickness of at least 850 μm and a diameter of at least 34 mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results.

In re Boesch and Slaney, 205 USPQ 215 (CCPA 1980).

Response to Arguments

3. Applicant's arguments filed 1/13/04 have been fully considered but they are not persuasive. Applicants argue that "Figs. 9-11 in Suzuki show microlenses resulting from experiments having diameters ranging from about 20-500 μm , and thicknesses ranging from about 0.23-3.73 μm . Further, Fig. 4 shows a microlens "...having a diameter of 100 μm ..." and a maximum thickness of 10 μm . (Suzuki col. 9, lines 45-51 – emphasis added) The successfully formed microlenses disclosed in Suzuki are limited to be significantly smaller than the resin-cemented optical elements of the subject application. Thus, Suzuki neither discloses, nor suggests a resin layer having a thickness that is "...850 μm or larger at a position which is thickest in said resin layer." However, it is to be pointed out that the optimum range for the thickness of the thicker portion of the resin layer would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results and it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the thickness of the thicker portion of the resin layer in Suzuki et al. to have a thickness of 850 μm or larger, since it has been held that where the general conditions

Art Unit: 1772

of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. MPEP 2144.05(II).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1772

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Catherine Simone
Examiner
Art Unit 1772
March 23, 2004



HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

3/29/04